

Ser. No. 09/980,892  
Response to Office Action of 21 May 2003  
Atty Docket 117040-51

### REMARKS

The Examiner states that claims 1-36 were pending in the application at the time of the Office Action. However, claim 4 was previously canceled, so the pending claims are 1-3 and 5-36. The Examiner has made no rejection of claim 4 in the present action, so it is believed that the Examiner has erred in stating that claims "1-36" are pending.

### Specification

The Examiner's prior objection to the abstract is not repeated, so it is believed to have been overcome by the amended abstract provided previously.

It is unclear that the substitute specification filed on 3 December 2001 has been entered. The undersigned attorney states that it contains no new matter and the Examiner seems to indicate that his inspection agrees with this. If that is correct, the applicant requests entry of the substitute specification.

### Priority Document

The Examiner correctly notes that priority is claimed from Germany applications 199 25 742.6 (filed 5 June 1999) and 100 21 273.3 (filed 26 April 2000). The Examiner indicates that a certified copy of the first of these applications has not been filed. The Examiner is reminded that this case is a national stage entry of PCT case DE 00/01385, which claims priority from that application. The papers filed include a copy of the Form PCT/IB/308 notice, dated 14 December 1999, that the international application has been forwarded to the US Patent Office and is conclusive evidence of that fact. In the prior Office Action dated 14 May 2002, the Examiner indicated that all certified copies of priority documents had been received.

### Oath or Declaration

The Examiner has indicated that the oath or declaration is defective because it claims priority on a German application (100 21 273.3) filed on the same date as the present application. This is indeed correct, but it does not render the declaration defective. The applicant, relying upon German 199 25 742.6 of 5 June 1999, filed both the PCT application, of which this is a national stage entry, and the later German application (100 21 273.3) on the identical date. Therefore, the priority claim is proper and the declaration is not defective.

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### **Information Disclosure Statement**

The Examiner indicates that the Information Disclosure Statement filed on 3 December 2001 will not be considered because it lacks a "list of all patents, publications or other information submitted for consideration." Applicant respectfully disagrees. Applicant attaches, at the end of this response, a copy of the Form PTO/SB/08A, signed by the Examiner on 8 August 2002 and attached to the first Office Action mailed 14 August 2002.

### **File organization**

The above problems with the examination would suggest that the file wrapper is in some manner of disarray and the Examiner may wish to review it carefully.

### **Section 112 rejections**

The Examiner's rejection under 35 USC 112, second paragraph, of claims 1-36 [sic] regarding the lack of proper antecedent basis in claim 1 of "the controllable switching device" and the term "the controllable switching means" in claims 5, 18, 20 and 22 has been reviewed and addressed by consistent use of the phrase "the at least one controllable switching device," which is initially introduced at claim 1, line 4.

### **Section 102 rejections**

The Examiner has rejected claims 1, 3, 4, 8-11, 16, and 33 as anticipated by Matsuura (US Pat. 6,124,766) ("Matsuura '766"). The applicant respectfully traverses this rejection.

As the applicant has previously stated, in a prior response, Matsuura '766 is not relevant to the present invention as now claimed, because Matsuura '766 relates to a frequency converter circuit, that is, a circuit that is adapted to convert an input signal that has a first oscillation frequency to an output signal that oscillates at a second frequency that differs from the first frequency. In contrast, the present invention is a voltage controlled oscillator ("VCO") that creates an oscillating output signal with an oscillation frequency that is controlled by a control voltage.

Claim 1 also further distinguishes Matsuura '766. Particularly, the "at least one controllable switching device" (Sv) has a control input (Vcon) that allows controls of the

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inductance value of the LC-resonant circuit by means of a control voltage. For example, the inductance is  $L_1$  when  $S_v$  is open and is  $L_1/2$  when  $S_v$  is closed (in a case where  $L_1=L_2$ ). In this manner, the oscillation frequency takes on a value corresponding to a time average of the varying inductance values assumed during the oscillation period, as described in paragraphs [0024] through [0032] of the specification. This is achieved by periodically switching the second inductor  $L_2$  between in parallel or in series connection to the LC-resonant circuit. Hence, the output oscillation frequency ( $V_{dd}$ ) is tuned by the "effective" inductance which results from the time average of the varying inductance values during an oscillation period.

The applicant further believes that claim 1 distinguishes Matsuura '766 because claim 1 allows the controlling of a portion of the oscillation period of the LC resonant circuit, specifically, the portion during which the second inductor is connected to the LC resonant circuit. As a direct result, the switching frequency of the at least one controllable switching device is equal to the oscillation frequency. This is quite different from Matsuura '766, where the switching diode (shown as reference numeral 23) is actuated only when the received frequency changes from being in the VHF-HIGH range to being in the VHF-LOW range. In other words, the switching diode 23 will only be actuated when the selection of receiving channel is changed. See Col. 2, lines 10-23. This will certainly not be occurring at the oscillator frequency, but will probably only be occurring a few times per hour in a device like the cable modem described by Matsuura '766.

For at least these reasons, applicant urges that claim 1 is not anticipated by Matsuura '766. All dependent claims are also allowable.

### Section 103 rejections

In a new rejection made for the first time in this Office Action, the Examiner has also rejected claims 3 and 13 as being obvious over Matsuura '766

Without admitting that the additional limitations of claims 3 or 13 are "conventional" as the Examiner states, applicant respectfully urges that the conventionality of the limitation is irrelevant if claim 1, from which these claims depend, is not anticipated by Matsuura '766.

In responding to this rejection, the applicants note the obligation to disclose information involving inventorship, but it is not clear here that the Examiner has any potentially commonly

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owned art that is being considered as potential 102(e) or 102(g) art under Section 103(a).  
Therefore, applicant has no information to provide.

**Allowable subject matter**

The Examiner has indicated that a number of claims (2, 5-7, 12-15, 17-32 and 34) would be allowable if presented in independent form. For the reasons set forth above regarding Matsuura '766, it is proposed that all of the claims are allowable, and applicant respectfully declines to put any of these claims into independent form.

Accordingly, the applicant respectfully requests reconsideration of the rejections based on the claim amendments made above. After such reconsideration, it is urged that allowance of all claims will be in order.

Respectfully submitted,



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